ACAST
Spectrum Research Activities

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Agenda

- Introductions
- ACAST Spectrum Research
- Ohio University MLS Channel Characterization
- Open Forum
  - ACAST Spectrum Research approach
  - MLS expansion band usage?
  - Supporting data for re-characterization of 5091-5150 MHz?
  - Other potential spectrum
  - Open Discussion
- Collection of Recommendations

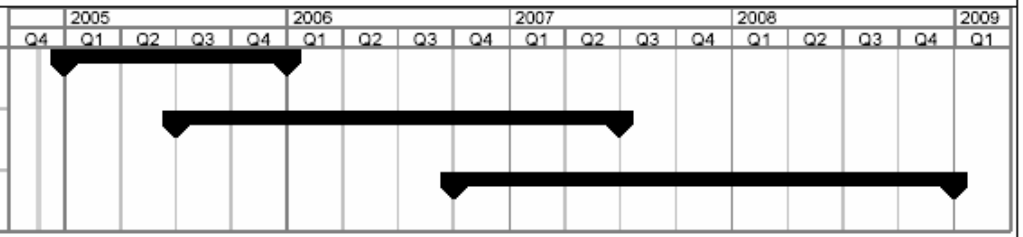
NExTNAS-CNS Workshop, 2003
"Aviation Spectrum Issues and Solutions"

"The criteria for success of the spectrum subproject would be that the MLS band is protected and utilized for new aviation applications and that sufficient aviation spectrum is available for the future of CNS. The status of the entire NExTNAS (what has become ACAST) project will depend on the success of the spectrum subproject."

The criteria for success of the spectrum subproject would be that all aviation spectrum is protected AND utilized…

Spectrum Sub-Project

ID	WBS	Task Name
1	H.1	MLS-band Use Concept
6	H.2	WRC-7 Technical Inputs
11	H.3	Long Term Aviation Spectrum Roadmap



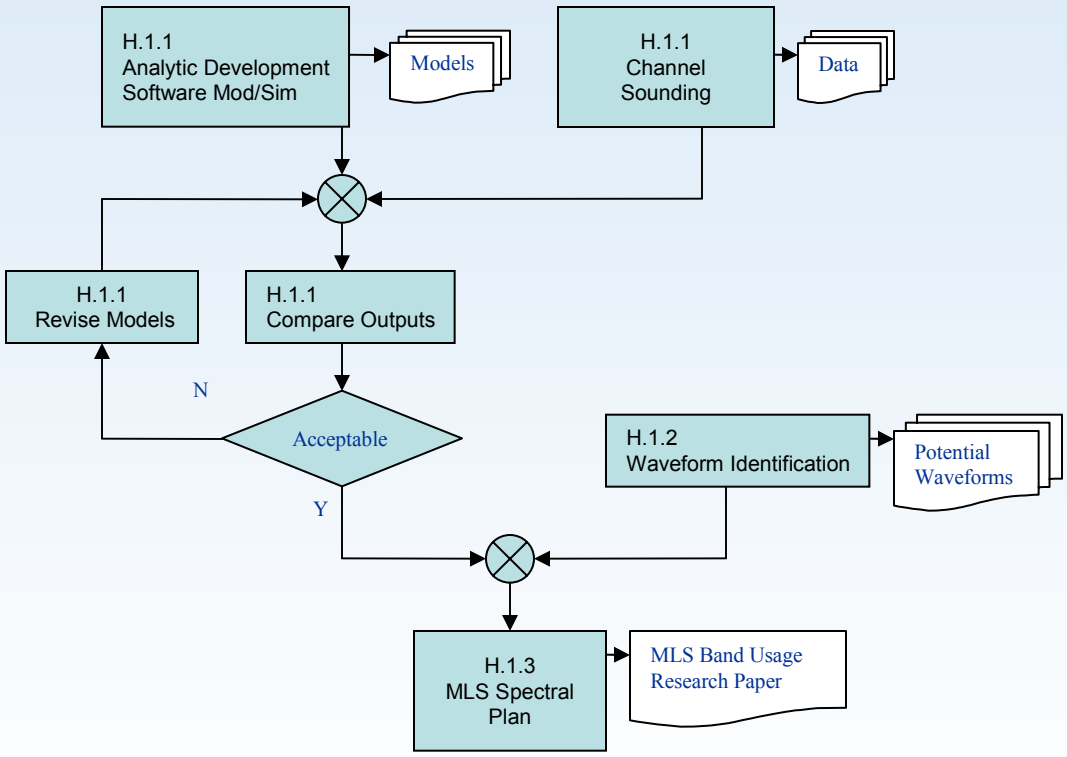
Project:
Date: Wed 8/18/04

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

Page 1

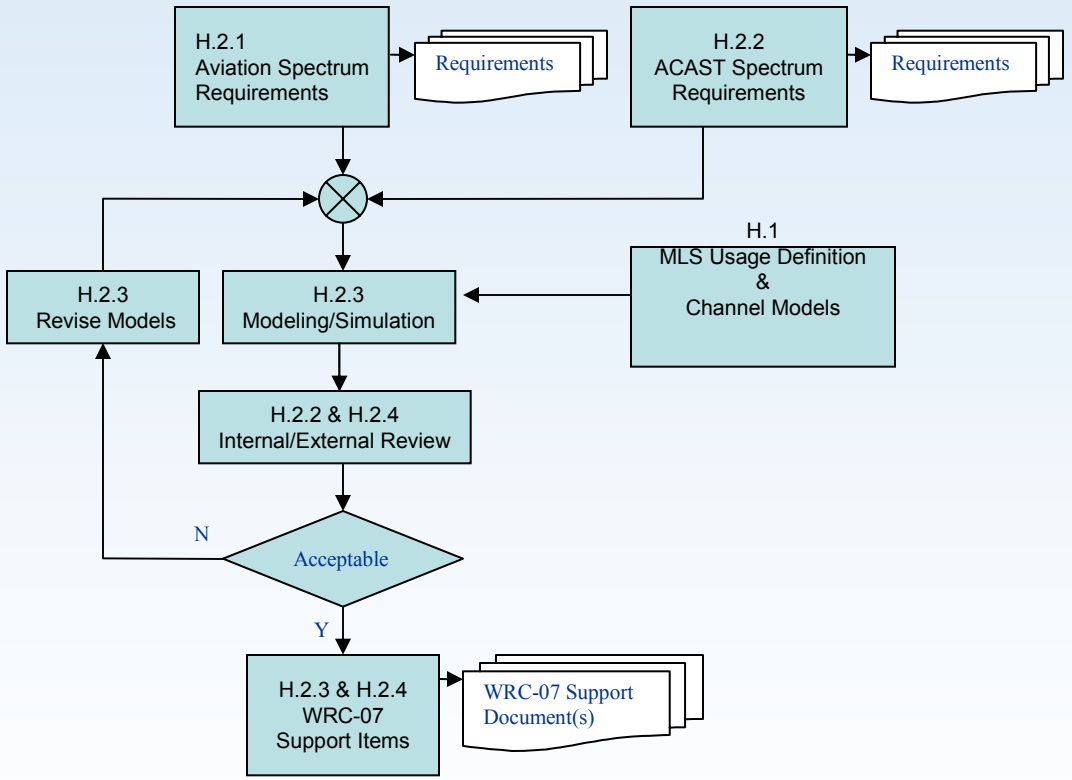
Phase I – MLS Band Channel Characterization

- Research channel models.
- Develop software model.
- Verification via channel sounding.
- Research/identify waveforms that may operate in the MLS band.
  - COTS
  - New design
- Suggested spectral plan for the 5091-5150 MHz range.



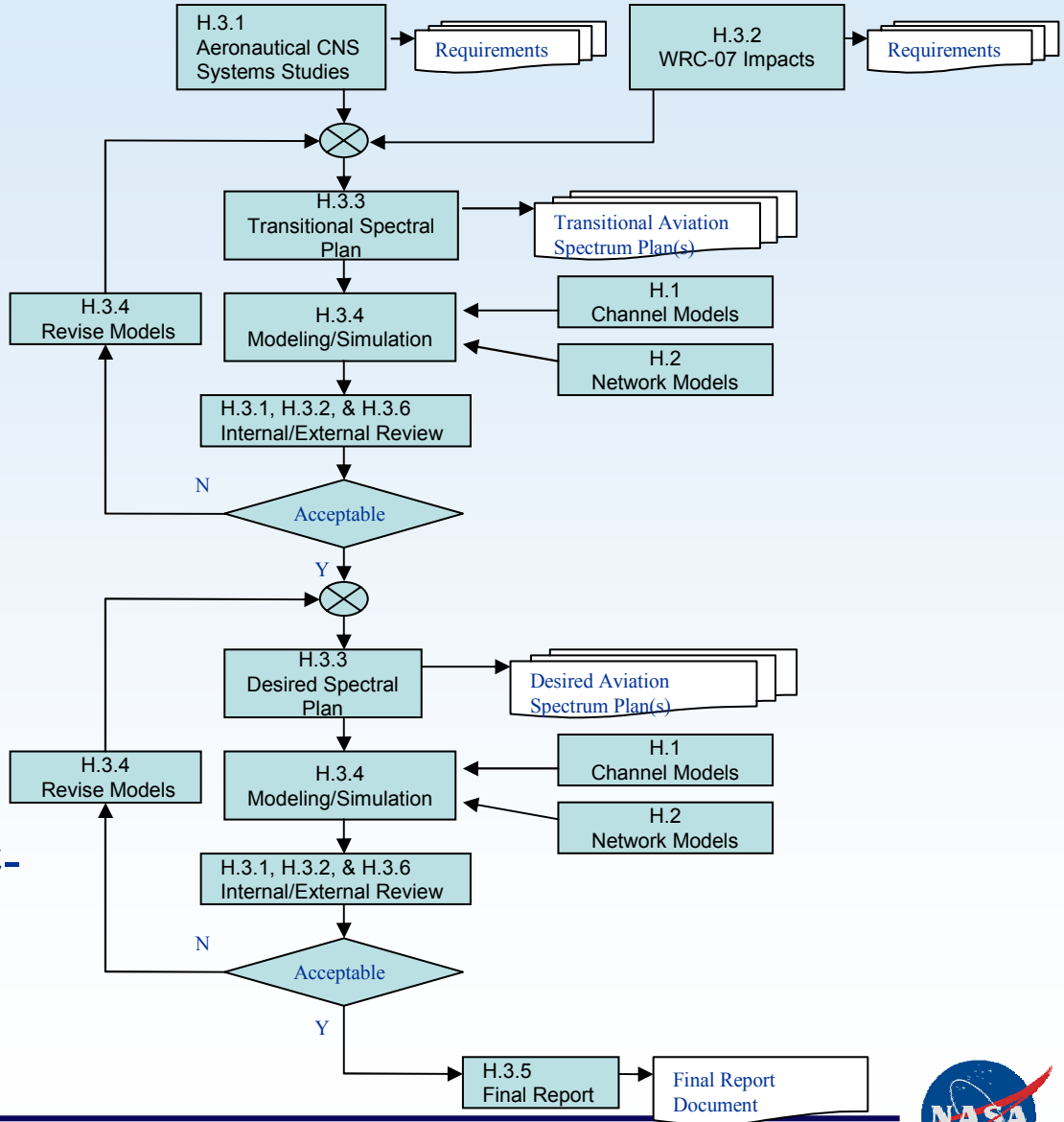
Phase II – WRC-07 Technical Inputs

- Address WRC-07 agenda item 1.6:
  - **"To consider allocations for the aeronautical mobile (R) service in parts of the bands between 108 MHz to 6 GHz, and to study current frequency allocations that will support the modernization of civil aviation telecommunication systems."**
- Demonstrate AM(R)S system potential in the 5091-5150 MHz band.
  - Possible COTS system prototyping.
- Consider other bands.



Phase III – Long-term Aviation Spectrum Roadmap

- Consider WRC-07 outputs.
- Develop Transitional Plan to support expected aviation traffic increase.
- Research a desired plan.
  - Potentially address agenda items for WRC-07.



Aviation Spectrum Needs and Challenges

- What is the supporting data required to enable a re-characterization of the 5091-5150 MHz band?
- What aviation bands should be high on the priority list for NASA R&D in spectrum area?